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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,733	12/19/2000	Doug Billings	6727/01088	4191

7278 7590 09/13/2006

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EXAMINER

SINGH, RACHNA

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/740,733	Applicant(s) BILLINGS ET AL.	
	Examiner Rachna Singh	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/21/06 has been entered.

2. Claims 1-30 are pending. Claims 1, 13, 25, 26, 28, and 29 are independent claims.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 25-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims raises a question as to whether the claims are directed merely to an abstract idea that would not result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Regarding independent claims 25-26 and 28-29, the claims recite "assigning the labels to the fields"; however, this does not produce a concrete or tangible result that is available in the real world. Merely assigning a label to a field or reading contents in a field is merely an abstract idea having no real world application. Therefore the claim is directed to non-statutory subject matter for failure to produce a tangible result.

Claims 27 and 30 are rejected for fully incorporating the deficiencies of their base claim(s) from which they depend.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-10, 13-15, 18-22, and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawat, US 6,662,340 B2, 12/9/03 (field 5/30/02, Continuation-in-part of application filed on 4/28/00) in view of Lee et al., US 6,535,883 B1, 03/18/03 (filed 08/04/1999).

In reference to claims 1 and 25-26, Rawat discloses a means for assigning labels for fields lacking a label (or tag). See abstract. Rawat discloses assigning a label to fields that do not have labels. Mapping a field according to its context or using an algorithm to analyze the field's programmatic name. See columns 6, lines 61-67 and column 7. Compare to ***“providing labels to be assigned respectively to fields; assigning the labels to the fields”***.

Rawat does not teach ***one or more rules applicable to the filled-in contents of the fields, machine reading the respective contents that have been filled into the fields***, or that the assigning of labels to the fields is ***responsive to the application of the rules of the content”***.; however, Lee teaches all of the fields in a document will comprise an associated validation rule which tests the contents of each field entered by the user to ensure it is filled out correctly. Compare to ***one or more rules applicable to the filled-in contents of the fields***. Lee's testing of the content of the fields is done either after a user has entered data into the field or after the form has been transmitted back to a centralized server computer. See column 2, lines 24-37. Compare to ***machine reading the respective contents that have been filled into the fields***. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Rawat's label assignment with Lee's application of rules to “filled-in” content in order to arrive at a method for ***assigning the labels to the fields responsive to the application of the rules of the content*** because it was desirable to provide labels for fields lacking labels in order to provide a user with a visual page element that communicated a field's purpose to a user. See column 3, lines 30-45 of

Art Unit: 2176

Rawat. Furthermore, in assigning rules to all the fields of the document to determine whether the filled-in content is accurate, the system is able to determine what type of information/data is contained within the field and thus assign a label appropriately.

In reference to claim 2, Rawat discloses analyzing the field's programmatic name. Following the field name analysis, the field name is compared to the entries in the field label dictionary and a match is found. See column 7, lines 1-35.

In reference to claim 3, Rawat discloses a means in which if a field lacks a label, the system identifies the mapping of at least one field preceding a current field and the mapping of the current field is based on the mapping of the preceding field. See column 10, lines 45-55.

In reference to claim 6, Rawat discloses a means in which if a field lacks a label, the system identifies the mapping of at least one field preceding a current field and the mapping of the current field is based on the mapping of the preceding field. See column 10, lines 45-55.

In reference to claims 7-10, Rawat discloses analyzing the field's programmatic name. Following the field name analysis, the field name is compared to the entries in the field label dictionary and a match is found. See column 7, lines 1-35. The dictionary could provide multiple label options such as a "area code" or "phone number" for a field comprising numbers. See columns 7-8. Rawat discloses utilizing the default value with

the field label dictionary that is found in the mapping of the field name to the dictionary as the label. See column 7, lines 1-35.

Claims 13-15 and 18-22 are rejected under the same rationale used in claims 1-3 and 6-10 respectively above.

Claims 28 and 29 are rejected under the same rationale used in claim 6 above.

In reference to claim 27, Rawat teaches that the form can comprise a plurality of fields which could include a form that is a table. The rest of claim 27 is rejected under the same rationale used in claim 1 above.

In reference to claim 30, Rawat does not teach a paper document; however, Lee teaches where a service provider already has a set of paper forms, a form template may be created for a paper form by creating a text file and typing in the name of the form, as well as names for fields of the form. In this manner, a service provider's paper forms may very quickly be converted into form templates. Those skilled in the art will appreciate that other methods of creating form templates may be employed without departing from the spirit of the invention. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a preprinted template for paper forms in order to easily convert the paper document into an electronic version.

Art Unit: 2176

7. Claims 4-5 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawat, US 6,662,340 B2, 12/9/03 (field 5/30/02, Continuation-in-part of application filed on 4/28/00) in view of Hetherington, US 2002/0010714 A1, 1/24/02 (filed 7/3/01, divisional of application filed 8/6/98).

In reference to claims 4-5 and 16-17, Rawat does not teach that the relation between the content fields is mathematical or semantic; however, Hetherington teaches a method of examining elements of data to determine attributes and examining the content of the elements and the contextual relationships to each other to determine semantic or syntactic information about the data. See page 17, paragraph [0370]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Hetherington's relationship matching in the system of Rawat in order to assign labels to the control items in an appropriate manner relative to the type of relationship among the different fields.

8. Claims 11-12 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawat, US 6,662,340 B2, 12/9/03 (field 5/30/02, Continuation-in-part of application filed on 4/28/00) in view of Gupta et al., US 6,199,079 B1, 3/6/01 (filed 3/20/98).

In reference to claims 11-12 and 23-24, Rawat does not teach that the document comprises a plurality of form documents sharing a common layout and that the

assignment is made with respect to all form documents. Rawat also does not teach that the assignment comprises choosing the assignment so as to satisfy a statistical criterion with respect to the satisfaction of the rules by the contents of the fields. Gupta, however, teaches identifying and matching identifiers from a form to a plurality of pages. See figure 1D and columns 9-10. The attributes are obtained from a first page and a matching pattern is determined to use the information for subsequent forms. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Gupta's recognition of patterns of data in fields of different forms to the system of Rawat as it extends its use to more than one document thus allowing fields of multiple documents to be labeled appropriately thus saving time spent by a user manually entering labels for common fields among multiple documents.

Response to Arguments

9. Applicant's amendments and arguments filed 06/21/06 have been fully considered.

Regarding rejections under 35 U.S.C. 101, Applicant argues the amendments to claims 1 and 13 overcome the rejections because database recording is a tangible, internal function of the data organization in the computer. Examiner agrees; however, it is noted that Independent claims 25, 26, 28, and 29 are also drawn to non-statutory

Art Unit: 2176

subject matter for failure to produce a tangible result as indicated in the rejections above.

On page 8 of the Remarks, Applicant argues that in order for Rawat to be effective as prior art, the '028 patent from which it claims priority as a Continuation-in-part, must disclose that it was desirable to provide labels for fields lacking labels. Specifically, Applicant argues that the '028 patent does not teach providing a label when it discloses a mapping process. In other words, the '028 patent fails to hint there is a problem of unlabeled fields.

Applicant further argues on page 9 of the Remarks that neither Rawat nor Lee teach ***assigning a label to fields responsive to application of rules to the contents of the fields.***

Examiner disagrees in light of the following remarks. The '028 patent discloses a mapping process for recognizing a form's fields and structure in order to identify required fields and match form fields with user data fields in the database to which they correspond. See column 12, lines 24-36. The '028 patent further teaches that a net result of the mapping process is that a form is parsed, its structure analyzed, and an identifier string is created and assigned from a concatenation of all the required fields in the form. The data fields can then be matched with the user data stored in the database. The '028 patent further discusses that forms can be structured such that

Art Unit: 2176

fields are not assigned names, assigned the same name, or one or more fields are assigned dynamic names (i.e. labels). See column 13, lines 5-54. Assigning a dynamic field name requires examining the contents or structure of the document. See column 13. Thus, the '028 patent does discuss assigning field names or "labels" to fields in a document. See column 13, lines 5-54. Thus the '028 patent provides support for the teachings of Rawat as discussed in the rejection above.

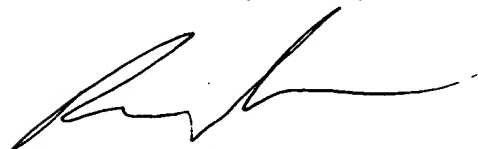
In view of the comments above, the rejection is maintained.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Art Unit: 2176

access to the Private PAIR system, contact the Electronic Business Center (EBC) at
866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Rachna Singh', with a long horizontal flourish extending to the right.

Rachna Singh
09/05/06